IMPACT OF AUTOMOTIVE TRENDS AND EMISSIONS REGULATIONS ON GASOLINE DEMAND. Dayton H. Clewell, Mobil Oil Corporation, 150 East 42nd Street, New York, N. Y., 10017. William J. Koehl, Mobil Research and Development Corporation, Research Department, Paulsboro Laboratory, Paulsboro, N. J., 08066.

Gasoline demand has increased steadily in recent years because of growth in vehicle registrations and miles traveled and because of trends in vehicle designs and equipment, among which emission controls are most notable. Through 1985, gasoline demand is projected to increase about 50%, and maybe substantially more depending on the emission controls required. In view of increasing demand and tightening supplies for energy in all forms, four alternatives are explored for moderating the growth in demand for gasoline. These alternatives are: (1) optimizing the energy cost of vehicle emission standards against the emissions reduction needed to achieve the ambient air quality standards; (2) increasing the use of smaller, more economical cars; (3) using more efficient engines; and (4) increasing the use of public transportation. Each can contribute to energy conservation; no one is the whole answer. The benefits of optimum standards can be assured by prompt government action. The trend toward smaller cars is already growing. Introduction of alternate engines requires a long lead time. Mass transportation could be most beneficial in metropolitan areas.